This newsletter is designed to facilitate watershed and resource planning, to provide education on the importance and need for natural resource protection, and to bring together local people and partners for successful planning efforts in northeastern Illinois.

USDA NRCS
Natural Resources Conservation Service

People improving the natural resources where they live and work

USDA Natural Resources Conservation Service | www.il.nrcs.usda.gov | Volume 2, 2001

RAP-M

Erosion & Sedimentation Inventory Procedure

With more and more emphasis placed on ensuring water quality and conserving our natural resources base, efforts on a watershed scale increasingly focus on resource inventories that capture current conditions in *small* watersheds. The Rapid Assessment, Point Method (RAP-M) sediment inventory procedure for Illinois was developed to statistically sample and gather data on erosion and land use conditions to help quantify effects of conservation alternatives within these small watersheds.

RAP-M is designed to gather data in a manner that is both cost effective and quick. Sheet, rill, ephemeral, gully, streambank, and even shoreline erosion data collected from sample units can be expanded to estimate activity within the entire watershed. Predictive, empirical formulas are used to estimate on-site sediment delivery as well as the sediment transport capability of the entire stream system (off-site delivery). This data can be used to predict total suspended sediment load at the outlet of a watershed on an average annual basis and help determine the highest priority areas, or subwatersheds, for future work.

This inventory procedure has been put into practice on approximately 30 watersheds throughout Illinois, and completed inventories are producing a better overall understanding of the erosion and sediment processes. The results are used to apply and evaluate conservation on the land to improve and protect our natural resources.

This procedure is now available in a booklet format in limited quantities and will soon be available in a downloadable format on the Illinois NRCS web site at www.il.nrcs.usda.gov.

Submitted by Roger Windhorn
NRCS Resource Soil Scientist

Aux Sable Creek Watershed

Resource Plan Hits the Streets

The completed Aux Sable Creek Watershed Resource Plan is in distribution throughout the watershed.

Over the past three years, the planning committee co-chairs Mary DeVries and Rita Sova worked diligently with other stakeholders, the Natural Resources Conservation Service (NRCS), and the Kendall County Soil & Water Conservation District (SWCD) to develop this comprehensive plan.

The plan presents information in an easy-to-read poster format and includes a brief history of the watershed, a description of the planning process, and a map outlining the watershed boundaries. This Illinois EPA -funded plan lists resource concerns identified by the planning committee along with Best Management Practices (BMP's) to assist in the improvement and protection of this watershed's exceptional natural resources. Biological inventories and surveys, which reveal the high quality of the stream, are reported in the plan's technical document.

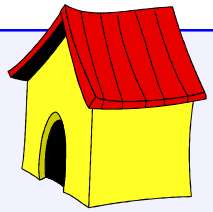
Approximately 78% of this 118,758-acre watershed is located in Kendall County, where the creek originates. The watershed includes areas in Will County and Grundy County, where the creek meets the Illinois River west of Minooka. The major land use in this watershed is agriculture.

A committee of stakeholders continues to work together to protect this exceptional natural resource through the implementation of the Aux Sable Creek Watershed Resource Plan.

To receive a copy of the plan, call the Kendall County NRCS/SWCD office at (630) 553-5457.

Submitted by Jill Keeton
NRCS District Conservationist &
Jen Wiesbrook
SWCD Resource Conservationist

Notes from the Shed



Planning for Urbanized Watersheds

We often use the term "urban watershed" to describe a wide range of variables with respect to the type and degree of human impacts. Understanding how resource conditions differ in urbanized watersheds is key for planning efforts in this type of environment.

Along with the general consideration of watershed scale and land use, an understanding of the historic timetable and stage of urbanization provides an important perspective. The time at which a watershed was developed generally relates to the degree of resource protection measures that were required and put in place. Many watersheds urbanized before the 70's lack the green space and stormwater practices incorporated today. As a result, restoration of a functional stream corridor in a heavily altered hydrologic regime is not easily obtained. Assessments for these watersheds should include stream hydrologic conditions such as stream flow velocity, magnitude and frequency of flooding events, stream channel modifications and obstructions, and land use within the adjacent corridor. In these heavily altered watersheds, restoration best management practices (BMP's) deal with resource issues stemming from hydrologic alterations and surface water pollutants.

When planning for a watershed in the early stages of urbanization, one can focus on implementation of BMP's relative to land use planning and new development with some consideration to retrofitting recent stormwater structures. In the early stage of urbanization, resource concerns differ slightly, with more focus on soil erosion and sedimentation, as well stream habitat issues. While development may begin to have hydrologic impacts, most existing modifications are the result of past agriculture land uses. A good measurement of the stage of watershed urbanization is found in the relationship between watershed imperviousness and stream resource problems (Schueler, 1990). This relationship demonstrates that stream resource issues become more severe with increasing watershed imperviousness. Measuring the percentage of the watershed imperviousness will identify the degree of resource challenges the planner faces.

Understanding and measuring the stage and extent of urbanization are key in developing a clearer perspective on the urbanization impacts on an individual watershed.

Tom Krapf
Resource Planning Specialist

Directory

Belvidere Office PH: (815) 544-2677	**Grundy Office** PH: (815) 942-0359	**Ottawa Office** PH: (815) 433-0551	**Streamwood Office** PH: (847) 468-0071
Bourbonnais Office PH: (815) 937-3233	**Lake County Office** PH: (847) 223-1056	**Paxton Office** PH: (217) 379-2371	**Sycamore Office** PH: (815) 756-3236
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A Note from the FOD3 ASTC...

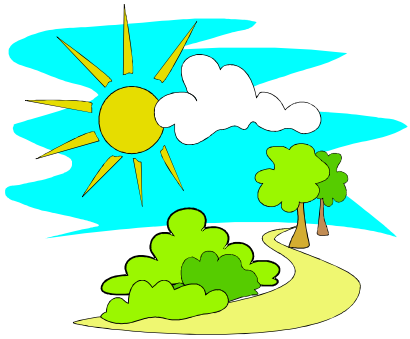
NRCS continues to work with local planning committees and communities to address local concerns through the resource planning process.

The list of active committees across the state has been growing. One of the most recent additions is a planning committee formed to work in the Mazon River Watershed in Grundy, Will, and Livingston Counties. Another effort underway is the formation of a committee to address concerns in the Little Calumet Watershed. This effort is unique in that it will involve committee members from both Illinois and Indiana.

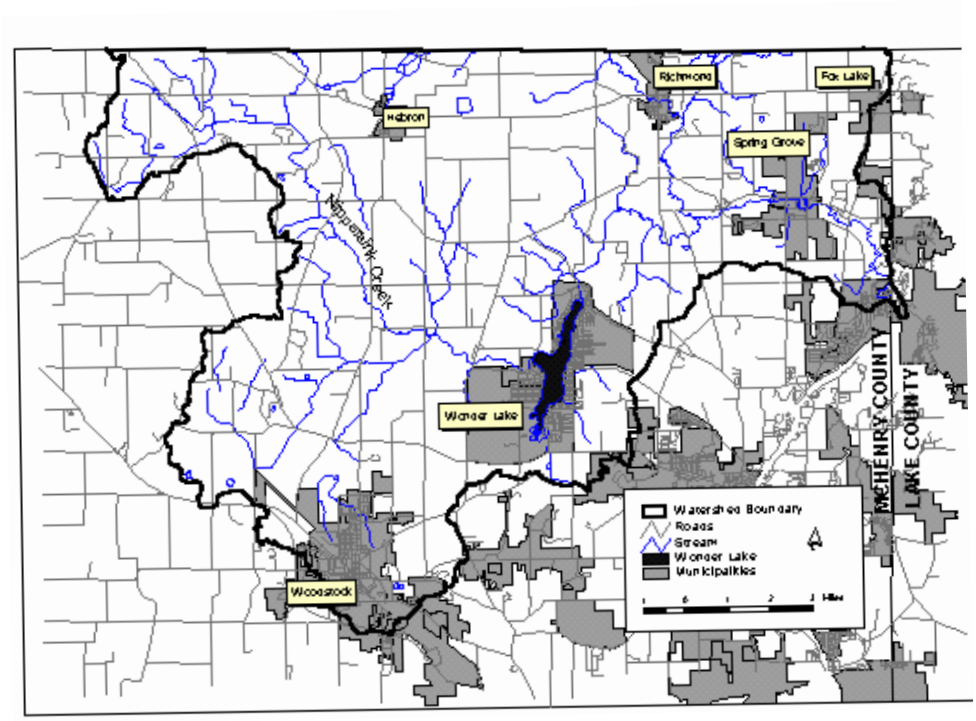
Through the watershed planning process, NRCS will facilitate meetings of local stakeholders, and the local people will make the decisions as to what actions are needed and acceptable.

I strongly support this "grassroots" approach to resource planning and encourage local groups to become involved in the planning process to address local watershed planning issues.

Tessa Chadwick
NRCS Assistant State Conservationist



WATERSHED PROFILE: Nippersink Creek Watershed



Description

Nippersink Creek is a 23-mile creek that flows from headwaters in Alden Township in northwestern McHenry County. The main channel meanders southeast to fill the 830-surface acre reservoir, Wonder Lake, before flowing back to the northeast and joining its north channel near Spring Grove. The 96,773-acre Nippersink Watershed empties into Pistakee Lake and is the largest tributary to the Fox River System.

Counties

McHenry and Lake

Municipalities

Fox Lake, Greenwood, Hebron, Richmond, Ringwood, Spring Grove, Wonder Lake, and Woodstock

Federal Congressional District

16

IL Senatorial District

32

IL Representative Districts

63 and 64

Population Estimated for 1990

32,591

Land Cover	Acres
Urban or Built-up	4338
Cropland	45075
Grassland	29190
Woodland	9238
Wetland	6250
Open Water	802
Barren Land	74
Roads & Streams	1751

Planning and Technical Committee Chair

Dick Hilton

Lead County Field Office

McHenry County NRCS/SWCD Office
Contact: Dave Brandt, District Conservationist

Step in Planning Process

Phase 3, Step 8: Implementation

General Resource Concerns

- Flooding
- Soil erosion and sedimentation
- Urban, agricultural, and construction runoff
- Streambank erosion
- Surface water management of stormwater flow and wetlands and flood plain protection
- Degradation and destruction of wetlands
- Fish and wildlife habitat and populations
- Continued urban growth
- Septic and sanitary facility failures and sewage treatment plant releases
- Human and animal waste management

Activities to Date

√ Completed Nippersink Watershed Plan.
√ Started water quality monitoring in the upper creek. Effort is funded by US Geological Survey and IDNR Conservation 2000 grants.
√ Assisted in development, publishing, and distribution of lake stewardship book detailing activities landowners can initiate to improve water quality.
√ Remeandered a section of Nippersink Creek.
√ Relocated aquatic species upstream of Wonder Lake Dam.
√ Received approval to hire a Conservation Engineer to oversee implementation of the Watershed Plan.
√ Completed streambank stabilization projects in Barber Fen and the North Branch.
√ Received $15,000 planning grant from IEPA.
√ Installed signs identifying Nippersink Creek.
√ Developed plan to address siltation in Wonder Lake.

Partnership Champions

Partnership

Sue Elston

"I enjoy working at the local level, helping local governments and the public to recognize the value of wetland resources and working with these groups to provide protection for this important resource," said Sue Elston about her career in natural resources.

Sue earned a BS and a Masters Degree in Biology with a focus on ornithology from Northern Illinois University in 1977 and 1980, respectively. After school, Sue slogged through wetlands conducting bird surveys part-time for an environmental consulting firm. In 1983, she put her full knowledge of the ecology of wetlands to work when she accepted a position with the Chicago District, Army Corps of Engineers reviewing permits for work in wetlands and other waters of the U.S.

In 1989, Sue joined the USEPA, where she has focused on a number of different aspects of wetland protection. Currently, as the Regional Wetland Coordinator, Sue works in a 6-state region to help states develop wetland protection programs. She also reviews most of the wetland mitigation banks proposed within the region. Sue loves to get in the field to appreciate wetland communities while overseeing Advanced Identification of Wetlands (ADID) work. Sue has been involved in ADID work in Lake, McHenry, and Kane Counties. She also contributes to several local watershed planning efforts, such as the Nippersink Creek and Blackberry Creek watershed plans.

"I love being outdoors," she says, "All of the vacations my husband and I take are camping oriented. I enjoy birding and fly-fishing and spend much of my free time with my horse, Wiley."

Stakeholders

Donna Conley

Donna Conley sets no limit on her extraordinary efforts for the Willow Creek Watershed and the Upper Rock River Ecosystem Partnership.

Donna grew up on a dairy farm in the beautiful Kickapoo Valley of southwest Wisconsin and earned a BS in education and dietetics from Iowa State University in Ames. In 1965, Donna and her family purchased and began renovating the then-condemned farmhouse on 18 acres of the original Stage Coach farm, circa 1838, in the Village of Machesney Park. Willow Creek meanders through this property on the way to the Rock River.

In the 1970's, meetings with Harlem Township and the Army Corps of Engineers began to focus on the area's watershed related issues. Without financial support from local units of government, Donna stabilized the creek banks on her property and solicited support from the Village and landowners along Willow Creek. Donna also sought assistance from the NRCS, Cooperative Extension, and the Winnebago County SWCD.

Donna's dedication contributed greatly to IDNR's 1999 recognition of the Upper Rock River Ecosystem Partnership. As a member of the Willow Creek Homeowners Association, she also secured an IDNR grant to study land use, water quality, erosion concerns, flooding, and streambank stabilization in the Willow Creek Watershed. Her study will also assemble data for a Hydraulic and Hydrology computer modeling report. To top it all off, Donna publishes a newsletter at her own cost to keep Willow Creek property owners informed of local news.

NRCS/SWCD

Shannon T. Allen

As a child riding in the back seat of his family's car, Shannon Allen would often observe how "cool" the terraces along highway 51 in Christian County looked. Years later as a Resource Conservationist, Shannon worked on a set of terraces on that very same farm.

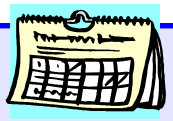
Shannon attended the University of Wisconsin-Stevens Point and received a B.S. in Soil Science in 1990.

In 1989, Shannon began his career back home in Illinois as a Soil Scientist Intern in Clay County. He later took a job at the McHenry County SWCD as a Resource Analyst, but soon accepted the Resource Conservationist position in Christian County. Shannon takes a great deal of pride in the accomplishments made in his seven years in Christian County.

Shannon now works where he grew up, in Macon County, as an SWCD Watershed Specialist focusing on the protection of Lake Decatur from both sediment and nitrates. He assisted the Planning Committe in the formation of subcommittees for each subwatershed in the Lake Decatur Watershed. Current efforts focus on completion of the Sand Creek plans and related work on Finley Creek. In 1999, Shannon became licensed as a Certified Professional in Erosion and Sediment Control (CPESC).

Shannon feels the NRCS/SWCD staffs in Macon County work well together, and he enjoys his work. He looks forward to serving his home county for several more years. Shannon also enjoys bear hunting and spending time with his wife and 15-month-old daughter. "She really helps me remember why I have chosen a profession that allows me to protect our natural resources, " said Shannon.

Calendar of Events



August 23-24 Ephemeral Wetlands Conference. Chicago, IL. Contact Jennifer Hammer for more information: (630) 428-4500.

October 2-4 The 2001 Governor's Conference on the Management of the Illinois River System. Peoria, IL. For more information, contact the Heartland Water Resources Council at (309) 637-5253.

November 1 8-4 P.M. Best Management Practices Workshop - Examples and hands-on design with a focus on the DuPage River Watershed. Contact Jennifer Hammer for more information at (630) 428-4500.

Nov. 12-14 Farming on the Edge: Conservation, Community and Commerce. Pheasant Run Resort, St. Charles, IL. Contact Eileen West at (413) 586-9332.

Sustainability Series

September 13 1-4:30 P.M. Conservation Design Site Planning.

October 4 6:30-9:30 P.M. Roadblocks to Implementing Sustainable Development.

October 30 1-4:30 P.M. Sustainable Regional Planning.

November 15 1-4:30 P.M. Alternative Architectural Design.

All seminars are $15. For more information and registration, contact The Conservation Foundation at (630) 428-4500.

A Different Perspective...

the Viewpoint of a Sociology Student on Resource Planning

In resource and watershed planning, a committee of community members is facilitated and informed by NRCS staff, including both facilitators and sociologists.

As a neutral party, the facilitator works as a recorder, a liaison, and an educator. Such a position requires the ability to see many viewpoints and realities, and to approach situations and people non-judgmentally, as a documenter rather than a decision-maker. The facilitator documents all of the concerns a group voices, lets people express themselves, and keeps them on track in the planning process. Facilitation demands the establishment of a rapport with a group, to ensure that the citizens feel comfortable in taking control and ownership over the planning project. Working with many groups with numerous concerns necessitates a balanced perspective on diverse opinions and communication styles. Therefore, an understanding of social collaboration, conflict, and group processes provides a good basis for each challenging, unique situation that a facilitator may encounter.

Sociologists are other specialists who are especially helpful not only with planning team and partnership facilitation, but also in their technical expertise. Finding how community members interact with their environments can be done through research of the "larger community context," which may include literature review of newspapers, town logos, civic group newsletters, or city meeting minutes. A sociologist also employs social scientific tools of quantitative and qualitative research, including data gathering by observation, group discussion, personal interviews, and surveys.

Considering these theoretical frameworks, the sociological perspective and tools can determine the important factors and considerations for controversial issues that planning teams must consider.

Submitted by Joan Esarey
NRCS Earth Team Volunteer

Watersheds on the Web

Adopt-a-Watershed: *www.adopt-a-watershed.org*

Center for Watershed Protection: *www.cwp.org*

Conservation Technology Information Center (CTIC) *www.ctic,purdue.edu/ctic/ctic.html*

Des Plaines Watershed Alliance: *www.desplaineswatershed.org/alliance/links.html*

DuPage River, Big Rock Creek and Blackberry Creek: *www.theconservationfoundation.org*

EPA Surf Your Watershed: *www.epa.gov/surf*

Fox River Ecosystem Partnership: *www.foxriverecosystem.org*

Illinois Watershed Management Clearinghouse: *web.aces.uiuc.edu/watershed*

Kishwaukee River Watershed: *www.mcdef.org/kwke.htm*

Salt Creek Watershed (COMING SOON): *www.saltcreek.org*

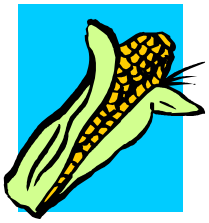
Silver Creek Watershed: *www.silvercreekwatershed.com*

USDA's Natural Resources Conservation Service: www.il.nrcs.usda.gov

Wisconsin-Illinois Upper Des Plaines River Ecosystem Partnership: *homepage.interaccess.com/~niwca/desplaines.htm*

Nutrient Management

Early Success in East-Central Illinois Watersheds



A Nutrient Management project launched in five East-Central Illinois watersheds last spring has proven to be both popular and successful. In the first year, 495 tracts of land, covering nearly 36,000 acres and representing 41% of the corn acres in the selected watersheds, were enrolled in this Illinois EPA-funded endeavor (see table at right).

Producers enrolled in this project receive a $5 per-acre incentive payment for following a nutrient management plan developed by a Certified Crop Advisor or other certified agricultural professional who is approved as a *Third Party Vendor*. Third Party Vendors craft plans based on University of Illinois fertility recommendations and Natural Resources Conservation Service (NRCS) requirements. NRCS employees conduct reviews to ensure the plans meet the requirements of the project while Soil and Water Conservation Districts (SWCD's) administer the project locally.

Illinois EPA is pleased with the initial results and agreed to fund the project for a third year, crop year 2003, and to expand the project into additional watersheds. IEPA also added a new feature for crop year 2002, which will provide the Third Party Vendor with a direct payment of $2 per-acre for the development of Nutrient Management plans.

A Third Party Vendor training session was held June 26th at the Champaign County Farm Bureau. CCA's, Certified Professional Agronomists, and Certified Professional Crop Consultants were approved as a Third Party Vendors for this project and for future projects.

Nutrient Management Project
-Acres Enrolled-

Watershed	County	Number of Tracts Enrolled	Acres Enrolled	% of Corn Acres 1/
Lake Georgetown	Champaign, Edgar, Vermilion	274	19,624.9	46.7
Lake Bloomington	McLean	83	6693.5	37.4
Lake Decatur 2/	Macon	68	4,239.8	32.6
Lake Vermilion 3/	Vermilion	27	3,051.4	33.2
Paris Twin Lakes	Edgar	43	2,313.6	42.3
Total: 5 watersheds		**495**	**35,923.2**	**41.0**

1/ This was calculated assuming 50% of the agricultural land is in corn and using the breakdown of land uses developed by IEPA Groundwater Section. Percent Ag. land used: Lake Decatur: 79.6%; Lake Georgetown: 85.8%; Lake Vermilion: 78.2%; Paris Twin Lakes: 75.0%; Lake Bloomington: 83.6%.

2/ Big and Long Creeks: a 32,656-acre subwatershed within the Lake Decatur watershed.

3/ A 23,500-acre subwatershed of the North Fork Vermilion watershed.

For more information on approval as a Third Party Vendor, future training sessions, or for more details on this project, contact Britt Weiser, NRCS Agronomist, at (217) 379-2371 EXT 109.

Submitted by Britt Weiser
NRCS Agronomist

PERSONAL PROFILE:
Joel Schmidt

I began my career with NRCS as a student intern in the Illinois State Office in May of 1998 and continued part-time while I finished my last semester that fall. While working as an intern, I worked on the design of two large sediment basins for Washington Lake and assisted the Planning Team staff with various projects throughout the state.

I graduated from the University of Illinois in December 1998 with a bachelor's degree in Agricultural Engineering with an emphasis in Soil and Water Resources. Soon after, I began a full-time position as an Agricultural Engineer in the Amboy Field Office. The decision to accept a career with NRCS was not a difficult one. From the beginning of my experience as an intern, I saw that the challenges and benefits of work with NRCS were very unique. I was immediately drawn to a career in conservation by the encouraging and friendly staff and the job satisfaction of working with others who truly care about conserving our natural resources.

Since then, I have planned and designed a variety of conservation practices in western Illinois. I also participated in providing conservation planning and design training to new employees. Last month, I accepted a position in the NRCS Plainfield Watershed Planning Office. I look forward to the new and exciting challenges that await me in northeast Illinois.

Joel Schmidt
NRCS Agricultural Engineer

Blackberry Watershed Plan:
Highlights of the First Year of Implementation

This first year of implementation has been busy for communities working with the Blackberry Creek Watershed Plan. The concepts and ideas associated with good watershed planning are becoming popular in this 73 square mile watershed. Blackberry Creek is 32 miles long, located mostly in southern Kane County in northeastern Illinois. The lower reaches of the creek flow into Kendall County and drain into the Fox River in Yorkville.

The Blackberry Watershed Plan outlines 40 recommendations, which are grouped into four primary goals:

1. Reduce flooding,
2. Improve water quality,
3. Avoid negative impacts of new development, and
4. Establish a framework for implementation.

Activities in the first year of implementation include:

√ Kane County is working with the United States Geological Survey (USGS) to develop a hydrologic and hydraulic computer model of the Blackberry Creek watershed. An area of special interest, due to associated flooding problems, is the Montgomery overflow. This is an area in the watershed where, in times of high water, the water flows across land, "jumps" the Blackberry watershed, and runs through an adjacent watershed into the Fox River. Currently, a University of Illinois graduate student working with the USGS is specifically modeling the Montgomery overflow. This activity is planned to take three years and is now approximately 50 percent finished.

√ A study recently completed to investigate the feasibility and desirability of removing the Yorkville Dam examines several options for dealing with associated issues. The study found that the best option is to remove the dam and construct a natural channel with a gradual descent to the Fox River.

√ As awareness of the Blackberry Plan grows, municipalities include its recommendations in community development plans. To encourage this, The Conservation Foundation is putting together workshops that promote awareness of watershed dynamics. The first annual Sustainability Series, which began in March and runs through 2001, consists of 8 workshops to address 8 issues in watershed planning and offer alternative solutions.

√ A committee of concerned residents of the Windstone subdivision in Sugar Grove formed to explore new ways to address water quality issues associated with a 9-acre retention pond. Untreated stormwater empties into the basin, and lakeside homeowners mow and fertilize to the water's edge. The committee is submitting grant proposals for funding to plant native vegetation around the pond and at the sites where stormwater enters.

√ Other achievements include the removal of brush from the creek and Kane County's adoption of a new countywide stormwater management program to take effect in January of 2002.

Submitted by Ksenia Rudensiuk
Blackberry Creek Watershed Manager

A Glimpse of the Mazon River Watershed

The Grundy County Soil & Water Conservation District held a bus tour of the Mazon River Watershed for area residents and stakeholders on March 31. The trip began in Gardner and followed a route covering much of the Grundy County portion of the watershed as well as Brewster Run Creek, a tributary of the Mazon River near the Village of Dwight in Livingston County.

The Mazon River Watershed drains 333,570 acres (521 sq. miles) and includes portions of Grundy, Livingston, Ford, Kankakee, LaSalle, and Will Counties.

Area residents spoke about their part of the watershed and their concerns for the river's future. Several individuals identified problems as well as areas where conservation practices have been successfully established to restore the Mazon River's natural beauty. Mayor Daryl Holt of Dwight explained steps taken to control flooding and erosion within the Brewster Run portion of the watershed. He also fielded questions from downstream residents about the potential impacts of future work in the Brewster Run area. NRCS Community Planner Jody Rendziak explained the process of forming a watershed planning committee and encouraged all interested parties to attend future meetings to address their concerns and identify objectives for the group.

Participants attended a lunch at the Gardner House Inn-ternational where discussion on residents' concerns and possible solutions continued.

Submitted by Terri Wiegand
SWCD Resource Conservationist

Natural Resources Conservation Service
313-J Naperville Road
Plainfield, IL 60544

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This newsletter is also available online at: *www.il.nrcs.gov*

Highlights:

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